

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,698	07/29/2004	Tai-Yuan Chen	12739-US-PA	4697
JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE 7 FLOOR-1, NO. 100			EXAMINER	
			SALZMAN, KOURTNEY R	
TAIPEI, 100	ROOSEVELT ROAD, SECTION 2 FAIPEL 100		ART UNIT	PAPER NUMBER
TAIWAN		4128		
		.•	NOTIFICATION DATE	DELIVERY MODE
		·	10/15/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USA@JCIPGROUP.COM.TW

		Application No.	Applicant(s)			
		10/710,698	CHEN ET AL.			
Office Action Summary		Examiner	Art Unit			
		Kourtney R. Salzman	1709 4128			
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
WHIC - Exter after - If NO - Failu Any	ORTENED STATUTORY PERIOD FOR REPL CHEVER IS LONGER, FROM THE MAILING D nsions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. O period for reply is specified above, the maximum statutory period or to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICA 136(a). In no event, however, may a reply will apply and will expire SIX (6) MONTHS e, cause the application to become ABANI	TION. be timely filed from the mailing date of this communication. DONED (35 U.S.C. § 133).			
Status						
1)⊠	Responsive to communication(s) filed on 29 J	<i>uly 2004</i> .				
2a) <u></u> ☐	This action is FINAL . 2b)⊠ This action is non-final.					
. 3)□	☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Dispositi	on of Claims					
5) 6) 7)	Claim(s) <u>1-15</u> is/are pending in the application 4a) Of the above claim(s) is/are withdra Claim(s) is/are allowed. Claim(s) is/are rejected. Claim(s) is/are objected to. Claim(s) <u>1-15</u> are subject to restriction and/or	wn from consideration.				
Applicati	on Papers					
	The specification is objected to by the Examine					
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
	Applicant may not request that any objection to the		•			
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority u	ınder 35 U.S.C. § 119					
a)l	Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority documen 2. Certified copies of the priority documen 3. Copies of the certified copies of the priority application from the International Burea See the attached detailed Office action for a list	ts have been received. ts have been received in Appl prity documents have been rec uu (PCT Rule 17.2(a)).	ication No ceived in this National Stage			
Attachmen		·				
	e of References Cited (PTO-892) te of Draftsperson's Patent Drawing Review (PTO-948)		mary (PTO-413) ail Date			
3) Inform	mation Disclosure Statement(s) (PTO/SB/08) or No(s)/Mail Date		mal Patent Application			

DETAILED ACTION

Election/Restrictions

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - Claims 1-3, drawn to an apparatus for physical vapor deposition including a magnetron device where magnetic poles are reversed in situ, classified in class 204, subclass 298.16.
 - II. Claims 4-7, drawn to a process for physical vapor deposition including a magnetron device where two deposition processes are used to define one deposition cycle, classified in class 204, subclass 192.12.
 - III. Claims 8-15, drawn to an apparatus and a process for physical vapor deposition utilizing a rotating magnetron device with planarly- and axially-symmetric magnets, classified in class 204, subclass 298.22 and 192.25 respectively.
- 2. The inventions are distinct, each from the other because of the following reasons:
 - a. Inventions I and II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus as claimed can be used to make a different product such as the use of the apparatus to form an uneven coating by utilizing only one deposition process, as

Application/Control Number: 10/710,698

Art Unit: 1709

opposed to the two deposition processes creating the deposition cycle, which is used to create an even coating.

Page 3

- Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.
- b. Inventions I and III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different designs, modes of operation, and effects (MPEP § 802.01 and § 806.06). In the instant case, the different inventions disclose two different magnetron compositions and method of use. Invention I is strictly an apparatus for magnetron physical vapor deposition machine, while invention III is the apparatus and process regarding the design and use of a rotating magnetron. The two inventions share no similarities in the construction or design of the sputtering apparatus with regard to the development and operation of the magnetron system, essential to the inventions pending in the instant claim. Therefore, the apparatus of invention I is distinctly different and independent from the process and apparatus of invention III.
 - ii. Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions have

Application/Control Number: 10/710,698

Art Unit: 1709

acquired a separate status in the art due to their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Page 4

- c. Inventions II and III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different designs, modes of operation, and effects (MPEP § 802.01 and § 806.06). In the instant case, the different inventions disclose two different magnetron processes and the specifically design apparatuses. Invention II is strictly a process for the use of a magnetron, which requires two deposition processes for a complete deposition cycle, while invention III is an apparatus and process regarding the design and use of a rotating magnetron. The two inventions share no similarities in the use of the apparatuses, in the design of the apparatuses or in the effect of the deposition they create on the substrate. Therefore, the process of invention II is distinctly different and independent from the process and apparatus of invention III.
 - iii. Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions have acquired a separate status in the art due to their recognized divergent subject matter, restriction for examination purposes as indicated is proper.
- 3. A telephone call was made to Belinda Lee of the JIANQ CHYUN Intellectual Property Office on September 27 and September 28, 2007, to request an oral election to the above restriction requirement, but did not result in an election being made.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Application/Control Number: 10/710,698

Art Unit: 1709

Conclusion

Page 6

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Kourtney R. Salzman whose telephone number is (571)

270-5117. The examiner can normally be reached on Monday to Friday 7AM to 4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Barbara Gilliam can be reached on (571) 272-1330. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

krs

BARBARA GILLIAM

SUPERVISORY PATENT EXAMINER